

Common Questions about HPV and Cervical Cancer



For Women Who Have HPV

This information is for women who have the type of genital human papillomavirus (pap-ah-LO-mah-VYE-rus)—also just called HPV—that can sometimes lead to cervical cancer.

What is HPV?

HPV is a common virus. There are about 40 types of HPV that affect the genitals or sex organs of men and women. Some HPV types can cause genital warts. Other types can infect a woman's cervix and lead to cervical cancer over many years. But most of the time, HPV causes no symptoms or health problems and goes away by itself within two years. Experts do not know why HPV goes away in so many, but not all women.

How did I get HPV? Who gave it to me?

HPV is passed on through genital contact, most often during vaginal and anal sex. Most people never even know they have HPV or that they are passing it to their partner. For this reason, it may not be possible to know who gave you HPV or when you got it. HPV is so common that most people get it soon after they start having sex. In cases when HPV does not go away on its own, it may only be found years later.

Are there other ways I could have gotten HPV?

There are many myths about how people get HPV. You cannot get HPV from being unclean, from toilet seats, or from having an abortion. Also, you are not more likely to get HPV from having rough sex or sex during your period.



This is my first time hearing about HPV. Does having HPV mean I will get cancer? Will I still be able to have babies?

How does HPV cause cervical cancer?

HPV can cause normal cells on your cervix to turn abnormal. Most of the time, HPV goes away on its own. When HPV goes away, your cervical cells go back to normal. But if HPV lingers for many years, these abnormal cells can turn into cancer.

Can I prevent cervical cancer?

Yes. You can get screening tests that can find early signs of cervical cancer before you ever get sick. That way, problems can be found and removed before they ever become cancer. The Pap test and HPV test are cervical cancer screening tests.

How is the Pap test different from the HPV test?

Both of these tests help screen for cervical cancer, but they look for different things. The Pap test looks for cell changes on your cervix that could develop into cervical cancer. The HPV test looks for HPV, the virus that can cause these cell changes.

How likely am I to get cancer if I have HPV?

Few women who have HPV get cervical cancer—as long as they follow their doctor's advice for needed testing or treatment. If you have HPV, your doctor may check up on you more often and do more tests to look for changes on your cervix. That way, your doctor can find and treat any changes early, so you don't get cervical cancer. Be sure to follow up with your doctor!



Is there a treatment for HPV?

There is no treatment for HPV, but most people's bodies do eventually fight the virus off. There are treatments for the health problems that HPV can cause—like genital warts, cervical cell changes, and cervical cancer. Once abnormal cells are treated (removed), you may need to get Pap tests more often to make sure they do not come back.

Will I have HPV forever?

In most women, HPV goes away within two years. We do not know why it lasts longer in some women than others.

If HPV goes away, can I get it again?

If you have one type of HPV that goes away, you may not get that type again. But you still can get a different type. Remember, there are about 40 types of HPV that can infect the genital area.

Does having HPV affect my chances of getting pregnant or having healthy babies?

Having HPV does not make it harder to get or stay pregnant. The type of HPV you have should not affect the health of your future babies. But if you need treatment for abnormal cells (caused by HPV), the treatment could affect your chance of having babies. Ask your doctor if your treatment can impact your ability to get pregnant.

Will I pass HPV to my current partner?

If you have HPV and have been with your partner for a while, your partner is likely to have HPV too. There is no way to know if your partner gave you HPV, or if you gave HPV to your partner.

Can I prevent passing HPV to a new partner?

Condoms may lower your chances of passing HPV to your new partner, if used all the time and the right way. But HPV can infect areas that are not covered by a condom—so condoms may not fully protect against HPV. The only sure way to prevent passing HPV to a partner is not to have sex.

Can my male partner get tested for HPV?

Right now, there is no HPV test for men. HPV is just as common in men as in women, but its health complications tend to be more serious in women. The types of HPV that put you at risk for cervical cancer rarely cause health problems for most men.



Important Questions About
Cervical Cancer
Answered



GlaxoSmithKline

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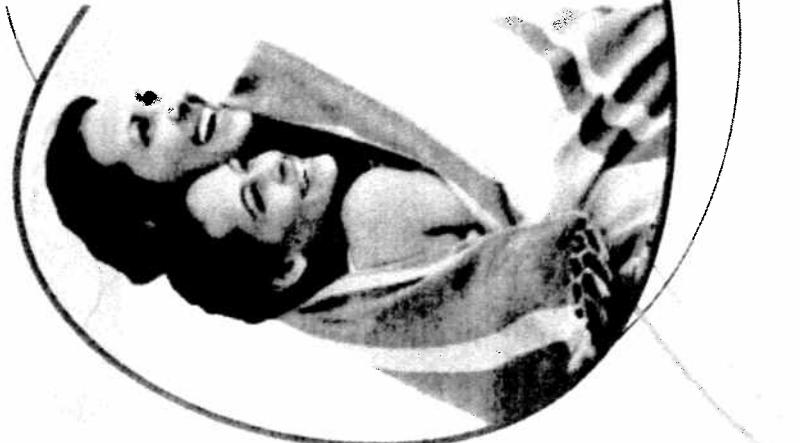
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What is cervical cancer?

Cervical cancer is cancer of the cervix. The cervix is the narrow lower portion of the uterus which connects to the vagina. It has several important functions including helping to maintain pregnancy and prevention of infection. Cervical cancer develops in the thin layer of cells lining the surface of the cervix. Cervical cancer doesn't develop overnight. Cells change from being normal to precancerous, and finally cancerous. These changes can take years to develop but can occur without symptoms.

There are two major types of cervical cancer. The most commonly diagnosed is squamous (skwa-muhs) cell carcinoma (car-sin-oh-mah), which arises from squamous cells that are normally found on the surface of the cervix. This accounts for about 80 percent of diagnosed cases. Most of the remaining 20 percent of cervical cancer is called adenocarcinoma (ad-noh-car-sin-oh-mah), which arises from cells lining the part of the cervix closest to the uterus.

While squamous cell cancers have been decreasing in numbers due to the Pap test, adenocarcinoma is on the increase. Because this cancer develops higher in the cervix, early abnormal cellular changes are difficult to detect. Adenocarcinoma may have poorer outcomes than squamous cell carcinoma, because it's often diagnosed at a later stage and spreads quickly. Adenocarcinoma tends to be diagnosed in young women, often between the ages of 20-49.

What causes cervical cancer?

Virtually all cases of cervical cancer are caused by a long-term infection with specific cancer-causing types of the human papillomavirus (HPV). Four types, 16, 18, 45 and 31 account for 80 percent of cervical cancer cases. Eleven other cancer-causing virus types are responsible for about 20 percent of remaining cases.

There are other virus types that do not cause cervical cancer and may lead to genital warts, common warts, or plantar warts.



- Cervical cancer is caused by a long-term infection of the cervix by cancer-causing types of virus.
- Types 16, 18, 45, and 31 account for 80 percent of cervical cancer cases.
- Squamous cell carcinoma accounts for about 80 percent of cervical cancer cases.
- Adenocarcinoma accounts for up to 20 percent of diagnosed cases.
- Diagnoses of adenocarcinoma in young women are increasing.

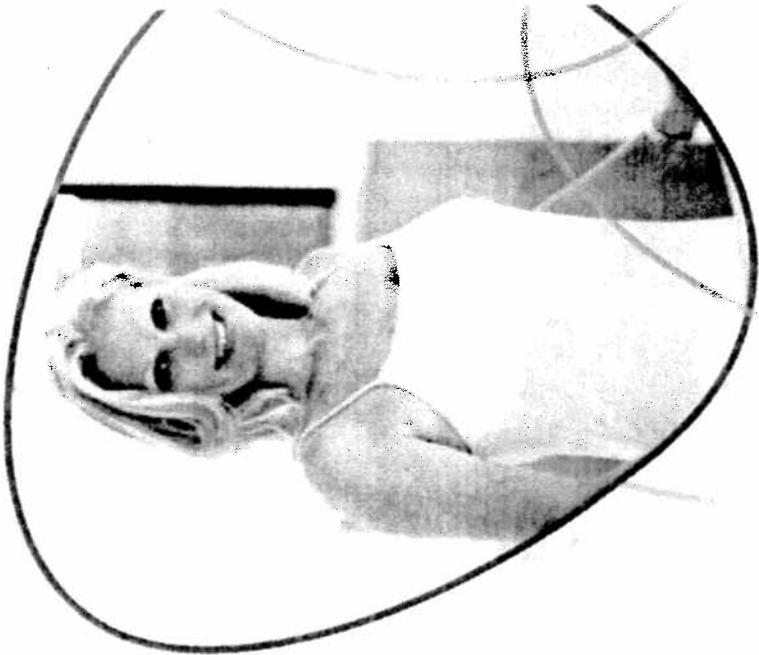


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Cervical Cancer

Who gets cervical cancer?

The truth is, all women may be at risk for cervical cancer. Cervical cancer is not hereditary. This disease occurs because of a long-term infection with cancer-causing virus types. This type of infection usually occurs by genital skin-to-skin contact, which may not include intercourse.



- All women may be at risk for developing cervical cancer.

Can a Pap test detect cervical cancer?

The Pap test is intended to detect cancerous changes in a woman's cervix. Currently, the Pap test is one of the most important tools for early detection of cervical cancer. In case of an abnormal result, additional tests are needed to assess the changes in the cervix.

About 55 million Pap tests are performed each year in the United States, with nearly 3.5 million of them (6 percent) coming back "abnormal." Two of the terms used to describe abnormal results are "dysplasia" and "squamous intraepithelial lesion."

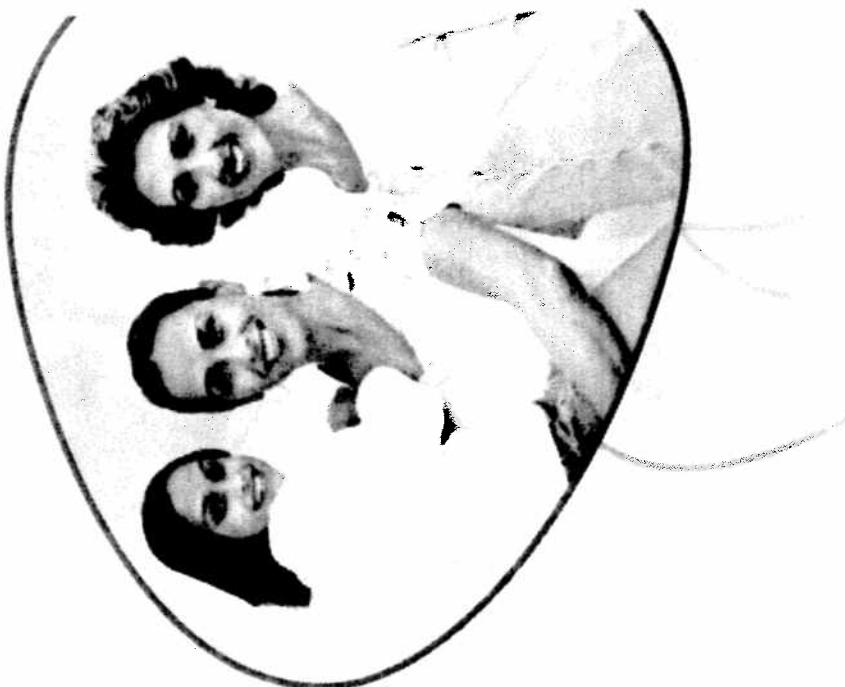
- **Dysplasia** is a term used to describe precancerous cells.
 - Mild dysplasia usually returns to a normal stage.
 - Moderate to severe dysplasia is more likely to lead to cervical cancer if no treatment is provided.
- **Squamous intraepithelial lesion**, or SIL is another term that describes changes in the surface cells of the cervix. Squamous cells are the thin, flat cells on the outer surface of the cervix. There are two types of SILs:
 - **LSIL** (low-grade SIL) means there are early precancerous changes to the cells. They are thought to be mild and often return to normal.
 - **HSIL** (high-grade SIL) indicates further and more advanced precancerous changes in the cells, which are more severe and have a higher chance of developing into cervical cancer.





Cervical Cancer

Cervical cancer generally takes time to develop, from a few years to decades. To find out if abnormal cellular changes are occurring, women should have a Pap test according to their doctor's recommendations. Typically, they are recommended within three years of first intercourse, but no later than age 21.



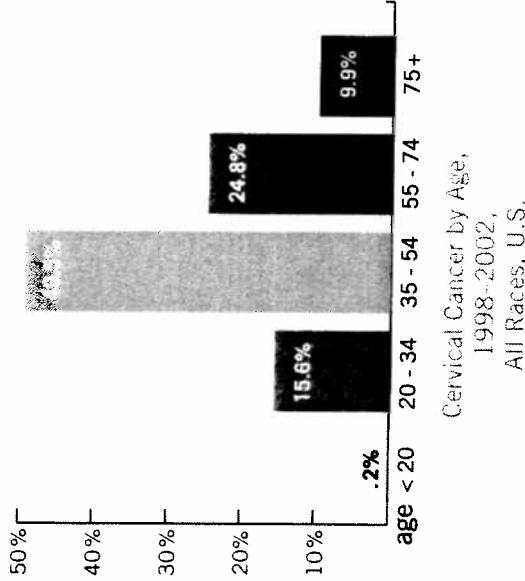
- The Pap test is an important tool for early detection of cervical cancer.
- More than 3 million of the 5.5 million Pap tests performed each year in the United States show abnormal results.
- Two terms used to describe abnormal Pap test results are "dysplasia" and "squamous intraepithelial lesion."
- Mild dysplasia and low-grade SIL can go away on their own; severe cases are more likely to develop into cancer.



Cervical Cancer

When is cervical cancer usually diagnosed?

In the United States, nearly half of the women diagnosed with cervical cancer are between 35 and 55 years old. There is rising concern about the increasing number of young women being diagnosed and dying from cervical cancer (it is now the second cause of death by cancer, after breast cancer, in women ages 20-39). In the U.S., it is estimated that a woman will die of cervical cancer every $2\frac{1}{2}$ hours.



- Nearly half of U.S. women diagnosed with cervical cancer are between 35 and 55.
- Cervical cancer is the 2nd most common cancer in women ages 20-39.
- A woman is estimated to die of cervical cancer every $2\frac{1}{2}$ hours.

Signs and Symptoms

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When do symptoms appear?

In the earliest, most treatable stage of cervical cancer there are typically no symptoms. Early abnormalities are usually detected through regular screening. Generally, symptoms occur only when cervical cancer has advanced to later stages.

Symptoms of cervical cancer may include:

- Long-term (ongoing) vaginal discharge
- Abnormal vaginal bleeding

In advanced stages, the symptoms may include:

- Loss of appetite, weight loss and fatigue
- Pain in the pelvis, back or legs
- Leaking of urine or feces from the vagina

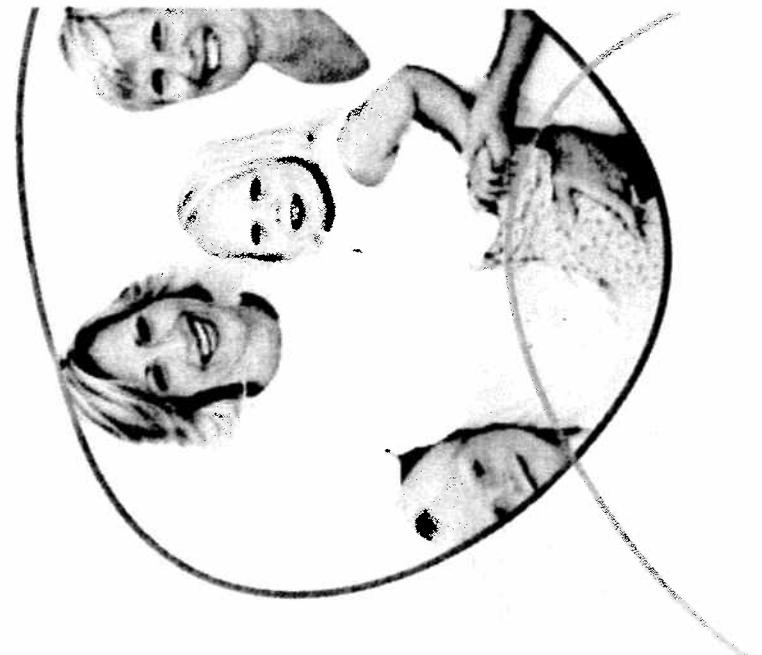


- Symptoms are rare in the early stages of cervical cancer.
- Some of the symptoms of more advanced cervical cancer may include ongoing vaginal discharge and abnormal vaginal bleeding.

How do doctors test for cervical cancer?

Early changes in cervical cells may not be visible to the naked eye. That's why **tests are needed to confirm the presence of precancerous or cancerous cells.**

- **Pap test.** Cells are collected from the cervix and sent to a lab to determine if abnormal cells are present.
- **DNA test.** Like the Pap test, cells are collected from the cervix and sent to a laboratory for analysis. This test can detect whether the HPV virus which causes cervical cancer is present. It is currently recommended for women over 30 years of age. But a physician may recommend it for women with certain abnormal Pap test results.
- **Colposcopy.** This is an examination using a magnifying instrument. A special solution is applied to the cervix so that the gynecologist can see abnormalities with the magnifying device.
- **Biopsy.** A biopsy is performed when there is evidence of an abnormality. It involves removing a small piece of tissue from the cervix, which is sent to a laboratory to assess the severity of the abnormality and to determine if cancer is present.



- Early changes in cervical cells may not be visible to the naked eye.
- Additional tests may be needed to confirm the presence of cancerous cells or other abnormalities.



Signs and Symptoms

What are the limitations of Pap testing?

A Pap test can fail to detect serious abnormalities or even some cancers. However, in countries where the Pap test is used as part of the regular screening process, it has helped reduce the incidence of squamous cell cervical cancer. This is why having a regular Pap test may be the most effective way for a woman to protect herself from this disease. By getting a regular Pap test she could increase the chance that an early or even late lesion can be found and treated.



- The Pap test is an effective cervical cancer-screening tool, but it is not perfect.
- Currently, regular Pap screening is the most effective way a woman can increase her likelihood of early detection of cervical cancer.

The Burden of Cervical Cancer

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Why is cervical cancer a major health problem?

Cervical cancer is one of the leading cancer killers of women worldwide. It is the leading cause of cancer death in women in the developing world. In the United States, cervical cancer is the second cause of cancer death in women ages 20-39.

In the United States, the cervical cancer rate has dropped by more than 70 percent since the 1950s due to screening. Yet cervical cancer still affects thousands of U.S. women and their families each year.

- In 2007, it is expected that 11,150 women will be diagnosed with invasive cervical cancer. About 3,670 women are expected to die from it.
- Each year, approximately 3.5 million women receive the bad news that their Pap test is abnormal.

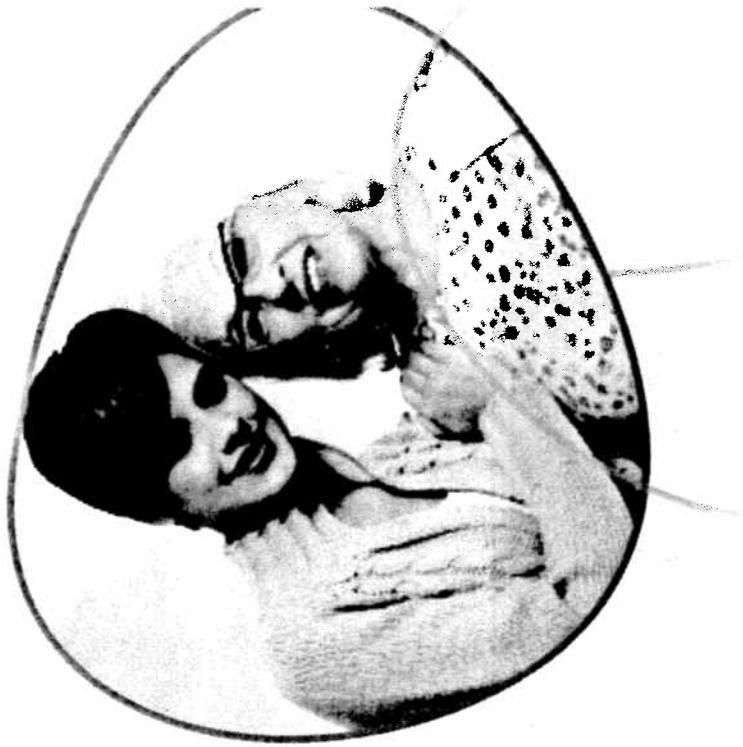


The Burden of Cervical Cancer

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A woman diagnosed with cervical cancer may experience a range of emotions: anger, embarrassment, confusion, frustration, grief, and worry. These feelings are normal reactions and can be dealt with through education—learning about cervical cancer, what causes it, and how it is treated. Talking things over—with a healthcare provider, friends, relatives, cervical cancer survivors, a social worker, counselor, or clergy member—is one way a woman can regain a sense of control as she moves through treatment and recovery.



- Cervical cancer is a global health problem.
- Thousands of U.S. women are diagnosed with it each year.
- Learning more about cervical cancer and talking about it with friends and family could be helpful.

Advancements in Cervical Cancer Prevention

Is there a way to prevent cervical cancer?

Current options available include cervical cancer screening and vaccination.

When should I be tested, and how often?

It depends on age. The American Cancer Society recommends that all women be tested for cervical cancer within three years of having first intercourse, but not later than age 21. Pap tests should be done every one to two years until age 30. Be sure to follow the recommendations of your doctor or other health care professional.

If a woman reaches age 30 and has had three normal Pap tests in a row, she can start getting tested every two or three years if recommended by her doctor. However, if a woman has other risk factors, her physician may recommend yearly testing.

According to the American Cancer Society, women who are 70 or older may choose to stop being tested for cervical cancer if they have had three or more normal Pap tests in a row and no abnormal Pap test results in the last 10 years. But, those with a history of cervical cancer, HIV infection, or a weakened immune system should continue to have Pap tests.

A DNA test detecting cervical cancer-causing viruses is also available.



- Women are urged to get regular Pap tests.
- Current options for the prevention of cervical cancer include cervical screening and vaccination.

Cervical Cancer Treatment

Part 3

How is cervical cancer treated?

The most commonly used methods to treat cervical cancer are surgery, radiation, and chemotherapy. Sometimes a combination of treatments with two or more methods may work best.

- **Surgery.** Several types of surgery are used to remove abnormal cells. Depending on how far the cancer has spread, surgery to remove the uterus and surrounding organs may be needed.

• **Radiation.** There are two types of radiation therapy. Both may be used to destroy cancer cells. The first one is external beam radiation therapy, which is an external process and requires treatments over a period of several weeks. The other is brachytherapy (brake-ee-therapy), which uses radioactive material that is placed near the tumor and is done under anesthesia. Treatments last a few days.

• **Chemotherapy.** Anti-cancer drugs are either taken in pill form or injected into the bloodstream, making this treatment potentially useful for cancers that have spread to other areas of the body.



- The most common treatments for cervical cancer are surgery, radiation, and chemotherapy.
- Two or more treatment methods may be combined.



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